Patent claims

1. Method for digital filtering of a time-discrete input signal, which has been produced by interpolation of a time-discrete pilot signal, whereby the frequency of the input signal is unequal to the frequency of the pilot signal and values of an output signal from the digital filtering are computed as a function of values of the input signal originating from various times in the past, wherein the values of the input signal are compressed and stored in compressed form.

2. Method according to claim 1, wherein the values of the input signal are compressed without any loss.

3. Method according to claim 1, wherein the values of the input signal are run-length-coded.

4. Method according to claim 1, wherein the values of the input signal are divided into symbol periods (D0-D5), in which a coherent range of memory values of the input signal, which are different from one another, and one coherent range or two coherent ranges of constants of the input signal, which are equal to the preceding value of the input signal, arise in each case and only the memory values of the input signal and the total value number of the symbol periods (D0-D5) are stored.

5. Method according to claim 4, wherein when a specific stored value of the input signal is accessed it is determined as a function of the lengths of stored symbol periods (D0-D5) to which symbol periods (D0-D5) the

specific value of the input signal belongs, at which point the specific value of the input signal is located in the symbol period and dependent on whether the point of the specific value within the symbol period corresponds to a memory value or a constant, a corresponding memory value of the input signal or a reconstructed constant is used as specific value.

6. Method according to claim 4, wherein the memory values of the different symbol periods (D0-D5) are seamlessly input into a memory.

7. Method according to claim 1, wherein the values of the input signal are divided into symbol periods (D0-D5), in which an invariable number of memory values of the input signal, the number of memory values being determined as a function of the order of the interpolation, and one coherent range or two coherent ranges of constants of the input signal arise, whereby the constants are values of the input signal which are equal to the value of the preceding input signal, and only the stored values and the total value number of the symbol periods (D0-D5) are stored.

8. Method according to claim 7, wherein when a specific stored value of the input signal is accessed it is determined as a function of the lengths of stored symbol periods (D0-D5) to which symbol periods (D0-D5) the specific value of the input signal belongs, at which point the specific value of the input signal is located in the symbol period and dependent on whether the point of the specific value within the symbol period corresponds to a memory value or a constant, a corresponding memory value of

the input signal or a reconstructed constant is used as specific value.

9. Method according to claim 7, wherein the memory values of the different symbol periods (D0-D5) are seamlessly input into a memory.

10. Method according to claim 1, wherein the values of the input signal are stored in a compressing first-in-first-out memory.

11. Method according to claim 1, wherein the digital filter is implemented as a comb filter.

12. Method according to claim 1, wherein the input signal is produced by integer or non-integer amount frequency multiplication of the pilot signal.

13 Method according to claim 1, wherein the digital filtering is an anti-aliasing filtering.

14. Device for the digital filtering of a time-discrete input signal with a synchronizer for production of the input signal by interpolation of a time-discrete pilot signal, whereby the frequency of the input signal is unequal to the frequency of the pilot signal and the device is equipped in such a manner that it can compute values of an output signal from values of the input signal originating at various times in the past, wherein the device is equipped in such a manner that it can compress and store compressed values of the input signal needed in order to compute values of the output signal.